Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

LOUISIANA, Southeast

LAZ034>040-046>050-056>070

Pointe Coupee - West Feliciana - East Feliciana - St. Helena - Tangipahoa - Washington - St. Tammany - Iberville - West Baton Rouge - East Baton Rouge - Ascension - Livingston - Assumption - St. James - St. John The Baptist - Upper Lafourche - St. Charles - Upper Jefferson - Orleans - Upper Plaquemines - Upper St. Bernard - Upper Terrebonne - Lower Terrebonne - Lower Lafourche - Lower Jefferson - Lower Plaquemines - Lower St. Bernard

28	**1100CST**	**0**	**0**	**16.9B**		**Hurricane/Typhoon**
29	**1700CST**					

Hurricane Katrina was one of the strongest and most destructive hurricanes on record to impact the coast of the United States. It will likely be recorded as one the worst natural disaster in the history of the United States to date resulting in catastrophic damage and numerous casualties in southeast Louisiana and along the Mississippi coast. Damage and casualties resulting from Hurricane Katrina extended as far east as Alabama and the panhandle of Florida. Katrina developed from a tropical depression southeast of the Bahamas on August 24th. After moving through the Bahamas as a tropical storm, Katrina strengthened to a category 1 hurricane prior to landfall in south Florida around the Miami area on the 25th of August. Katrina crossed south Florida and entered the Gulf of Mexico and began to strengthen. Hurricane Katrina strengthened to a category 5 storm on August 28th about 250 miles south southeast of the mouth of the Mississippi River with winds reaching their peak intensity of 175 mph and a central pressure of 902 mb. Post event analysis by the National Hurricane Center indicates that Katrina weakened slightly before making landfall as a strong category 3 storm in initial landfall in lower Plaquemines Parish. Maximum sustained winds were estimated at 110 knots or 127 mph and a central pressure of 920 mb around 610 AM CDT on August 29th in southeast Louisiana just south of Buras in Plaquemines Parish. The storm continued on a north northeast track with the center passing about 40 miles southeast of New Orleans with a second landfall occurring near the Louisiana and Mississippi border around 945 AM CDT as a Category 3 hurricane on the Saffir Simpson scale with maximum sustained winds estimated around 105 knots or 121 mph. Katrina continued to weaken as it moved north northeast across Mississippi during the day, but remained at hurricane strength 100 miles inland near Laurel, Mississippi. Katrina weakened to a tropical depression near Clarksville, Tennessee on August 30th.

Damage in southeast Louisiana, especially in the New Orleans area and the coastal parishes, was catastrophic. Hurricane protection levees and floodwalls were overtopped and/or breached resulting in widespread and deep flooding of homes and businesses. Much of Orleans and Plaquemines Parishes and nearly all of St. Bernard Parish were flooded by storm surge. Approximately 80 percent of the city of New Orleans was flooded. Thousands of people were stranded by the flood waters in homes and buildings and on rooftops for several days and had to be rescued by boat and helicopter. In Jefferson Parish, levees were not compromised, however many homes were flooded by either heavy rain overwhelming limited pumping capacity or storm surge water moving through in-operable pumps into the parish. Severe storm surge damage also occurred along the north shore of Lake Pontchartrain from Mandeville to Slidell with storm surge water moving inland as far as Old Towne Slidell with water up to 6 feet deep in some locations. Hurricane force winds also caused damage to roofs, power lines, and downed trees. Windows were broken in large buildings in the metro New Orleans area from wind and wind driven debris. In areas away from storm surge flooding, wind damage was widespread with fallen trees taking a heavy toll on houses and power lines, especially over St. Tammany and Washington Parishes. Excluding losses covered by the Federal Flood Insurance Program, insured property losses in Louisiana were estimated at 22.6 billion dollars. Overall uninsured and insured losses combined were estimated to exceed 100 billion dollars along the entire Gulf Coast.

Fatalities occurring in Louisiana as a result of Hurricane Katrina numbered approximately 1097 people as of late June 2006. The majority of the victims were in the New Orleans area. 480 other Louisiana residents died in other states after evacuating.
Detailed information on the deaths, locations, and indirect or direct fatalities will be described in updates to Storm Data.

Due to the failure of power and equipment prior to the peak of the storm, data for wind, storm surge, pressure, and rainfall are incomplete. A university portable weather unit measured the lowest pressure of 920.2 mb near Buras around 0616 AM AM CDT on Aug 29th. with 934 mb being measured at the National Weather Service Office in Slidell at 938 AM CDT.

The highest wind gust recorded in Louisiana and the adjacent coastal waters was 99 knots (114 mph) at the Grand Isle CMAN station (338 AM CDT on August 29th) before the gage failed, though higher wind gusts certainly occurred. While most of the metro New Orleans escaped the extreme winds, the extreme eastern portions of the metro area from St Bernard Parish into extreme east New Orleans experienced the western portion of the hurricane eyewall. Wind gusts between 120 to 125 mph were recorded at a couple of locations in East New Orleans. Wind gust to hurricane force (64 kt or 74 mph) were also recorded at New Orleans Louis Armstrong Intl Airport by an FAA wind instrument. In eastern St. Tammany Parish, wind gusts to 87 knots (100) mph were measured at Slidell by a wind tower deployed by a university. An estimated wind gust of 105 kt (120 mph) was taken at a hospital in Slidell.

Post storm high water surveys of the area conducted by FEMA indicated the following storm surge estimates: Orleans Parish - 12-15 feet in east New Orleans to 9 to 12 feet along the Lakefront; St. Bernard Parish - 14 to 17 feet; Jefferson Parish - 6 to 9 feet along the lakefront to 5 to 8 feet from Lafitte to Grand Isle; Plaquemines Parish - 15 to 17 feet; St. Tammany Parish - 11 to 16 feet in southeast portion to 7 to 10 feet in western portion. All storm surge heights are still water elevations referenced o NAVD88 datum.

Storm total rainfall amounts generally ranged from 7 to 14 inches with lower amounts observed farther west toward the Atchafalaya River. A rainfall total of 11.63 inches was measured at the National Weather Service Office in Slidell

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

LOUISIANA, Southeast

LAZ040-059-061>064-067>070 **St. Tammany - Upper Lafourche - Upper Jefferson - Orleans - Upper Plaquemines - Upper St. Bernard - Lower Lafourche - Lower Jefferson - Lower Plaquemines - Lower St. Bernard**

29 0200CST 1700CST **0** **0** **31.3B** **Storm Surge**

Storm surge damage in southeast Louisiana, especially in the New Orleans area and the coastal parishes, was catastrophic. Hurricane protection levees and floodwalls were overtopped and/or breached resulting in widespread and deep flooding of homes and businesses. Much of Orleans and Plaquemines Parishes and nearly all of St. Bernard Parish were flooded by storm surge. Approximately 80 percent of the city of New Orleans was flooded. Thousands of people were stranded by the flood waters in homes and buildings and on rooftops for several days and had to be rescued by boat and helicopter. In Jefferson Parish, levees were not compromised, however many homes were flooded by either heavy rain overwhelming limited pumping capacity or storm surge water moving through in-operable pumps into the parish. Severe storm surge damage also occurred along the north shore of Lake Pontchartrain from Mandeville to Slidell with storm surge water moving inland as far as Old Towne Slidell with water up to 6 feet deep in some locations

Post storm high water surveys of the area conducted by FEMA indicated the following storm surge estimates: Orleans Parish - 12-15 feet in east New Orleans to 9 to 12 feet along the Lakefront; St. Bernard Parish - 14 to 17 feet; Jefferson Parish - 6 to 9 feet along the lakefront to 5 to 8 feet from Lafitte to Grand Isle; Plaquemines Parish - 15 to 17 feet; St. Tammany Parish - 11 to 16 feet in southeast portion to 7 to 10 feet in western portion. All storm surge heights are still water elevations referenced to NAVD88 datum.

MISSISSIPPI, South

MSZ068>071-077-080>082 **Wilkinson - Amite - Pike - Walthall - Pearl River - Hancock - Harrison - Jackson**

28 1100CST
29 1700CST **0** **0** **7.3B** **Hurricane/Typhoon**

Hurricane Katrina was one of the strongest and most destructive hurricanes on record to impact the coast of the United States. It will likely be recorded as one the worst natural disaster in the history of the United States to date resulting in catastrophic damage and numerous casualties in southeast Louisiana and along the Mississippi coast. Damage and casualties resulting from Hurricane Katrina extended as far east as Alabama and the panhandle of Florida. Katrina developed from a tropical depression southeast of the Bahamas on August 24th. After moving through the Bahamas as a tropical storm, Katrina strengthened to a category 1 hurricane prior to landfall in south Florida around the Miami area on the 25th of August. Katrina crossed south Florida and entered the Gulf of Mexico and began to strengthen. Hurricane Katrina strengthened to a category 5 storm on August 28th about 250 miles south southeast of the mouth of the Mississippi River with winds reaching their peak intensity of 175 mph and a central pressure of 902 mb. Post event analysis by the National Hurricane Center indicates that Katrina weakened slightly before making landfall as a strong category 3 storm in initial landfall in lower Plaquemines Parish. Maximum sustained winds were estimated at 110 knots or 127 mph and a central pressure of 920 mb around 610 AM CDT on August 29th in southeast Louisiana just south of Buras in Plaquemines Parish. The storm continued on a north northeast track with the center passing about 40 miles southeast of New Orleans with a second landfall occurring near the Louisiana and Mississippi border around 945 AM CDT as a category 3 storm with maximum sustained winds estimated around 105 knots or 121 mph. Katrina continued to weaken as it moved north northeast across Mississippi during the day, but remained at hurricane strength 100 miles inland near Laurel, Mississippi. Katrina weakened to a tropical depression near Clarksville, Tennessee on August 30th.

Damage across coastal Mississippi was catastrophic. The storm surge associated with Hurricane Katrina approached or exceeded the surge associated with Hurricane Camille and impacted a much more extensive area. Almost total destruction was observed along the immediate coast in Hancock and Harrison Counties with storm surge damage extending north along bays and bayous to Interstate 10. Thousands of homes and businesses were destroyed by the storm surge. Hurricane force winds also caused damage to roofs,

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

MISSISSIPPI, South

power lines, signage, downed tress, and some windows were broken by wind and wind driven debris In areas away from storm surge flooding, wind damage was widespread with fallen trees taking a heavy toll on houses and power lines. Damage was less extensive in southwest Mississippi. Excluding losses covered by the Federal Flood Insurance Program, insured property losses in Mississippi were estimated at 9.8 billion dollars. Uninsured and insured losses combined were estimated to exceed 100 billion dollars across the Gulf Coast.

As of late October the following fatality figures were reported in the Mississippi coastal counties; Hancock- 52, Harrison - 83, Jackson - 17. Additional details on fatalities will be given in later updates to storm data

Due to the failure of power and equipment prior to the peak of the storm, data for wind, storm surge, pressure, and rainfall are incomplete. The lowest pressure on the Mississippi coast was estimated to be 928 mb where the hurricane made landfall near the Louisiana Mississippi border. A pressure of 976 mb was recorded at 0951 CDT by a university weather station deployed in Pascagoula, well east of the landfall location. At approximately the same time, the pressure at the NWS office in Slidell, just to the west of landfall location, recorded a pressure of 934.1 mb at 0938 AM CDT.

The highest wind gusts recorded in Mississippi and the adjacent coastal waters were 117 knots (134 mph) at the Pearl River County EOC office in Poplarville and 102 knots (118 mph) at 1000AM CDT by a university wind tower deployed at the Stennis Space Center in Hancock County. Maximum sustained winds in Mississippi were estimated around 105 knots (121 mph) near the storm's second landfall along the Mississippi and Louisiana border. Unofficial wind observations before the gage failed included a wind gust of 106 kt, (122 mph) at 0615 CDT by an amateur radio operator in Long Beach and a wind gust of 108 kt (124 mph) at the EOC in Pascagoula.

Most tide gages were destroyed by the storm surge so storm surge was determined primarily by post storm high water mark surveys conducted by FEMA. An estimated storm surge of approximately 23.0 feet occurred at the Hancock County EOC operations area in Waveland, and the high water mark measured on the Jackson County EOC building in Pascagoula was 16.1 feet. Preliminary estimates of storm surge along the Mississippi Coast include Hancock County 19-25 ft, Harrison County 19-25 feet, Jackson County 17-21 ft. All storm surge heights are still water elevations referenced to NAVD88 datum

Storm total rainfall amounts generally ranged from 10 to 16 inches across coastal and south Mississippi with much lower amounts observed over southwest Mississippi. The highest observed storm total rainfall was 11 inches at Stennis Space Center and near Picayune.

MSZ080>082	**Hancock - Harrison - Jackson**								
	29	**0200CST 1700CST**			**0**	**0**	**11.3B**		**Storm Surge**

Storm surge damage across coastal Mississippi was catastrophic and approached or exceeded the surge associated with Hurricane Camille and impacted a much more extensive area. Almost total destruction was observed along the immediate coast in Hancock and Harrison Counties with storm surge damage extending north along bays and bayous to Interstate Highway 10 in some instances. Thousands of homes and businesses were destroyed by the storm surge. Most tide gages were destroyed by the storm surge so storm surge was determined primarily by post storm high water mark surveys conducted by FEMA. An estimated storm surge of approximately 23.0 feet occurred at the Hancock County EOC operations area in Waveland, and the high water mark measured on the Jackson County EOC building in Pascagoula was 16.1 feet. Preliminary estimates of storm surge along the Mississippi Coast include Hancock County 19-25 ft, Harrison County 19-25 feet, Jackson County 17-21 ft. Wave action on top of the storm surge enhanced the damage in many area. All storm surge heights are still water elevations referenced to NAVD88 datum